

***SURGICAL TABLE
OPERATORS MANUAL***



MODEL 1700



MODEL 1700

SKYTRON STANDARD LIMITED WARRANTY

SKYTRON, a Division of the KMW Group, Inc. (SKYTRON) warrants all new products sold by it directly or through a dealer or other authorized representative, with exception to replacement parts, spares, bulbs (surgical lights), pads, and accessory items (surgical tables) to be free from defects in material or workmanship, under normal use and service, for a period of two (2) years. This warranty shall include the cost of repair or replacement of defective parts including the cost of service labor and travel time to the site of equipment use. Delays caused by the user in accessing the equipment for repair will be chargeable at the normal hourly rate for service by SKYTRON's authorized service representative. The warranty period shall begin with the initial operation or one (1) year after receipt of the product, whichever shall occur first.

Replacement parts, spares, bulbs (surgical lights), pads and accessory items (surgical tables) are warranted to be free from defects in material or workmanship, under normal use and service, for a period of ninety (90) days from receipt by the ultimate user, with exception to replacement parts supplied by SKYTRON, for products under warranty, which shall be covered for any remaining period of the original product warranty, or for 90 days, whichever is of greater benefit to the ultimate user.

SKYTRON's responsibility and liability shall be limited to the repair or replacement of any part which we, SKYTRON, determine to be defective within the applicable warranty period. Minor adjustments required as a result of normal wear during the use of the product within the warranty period are not covered under warranty. The labor portion of this warranty is covered by SKYTRON's Authorized Service Agent. Repairs made by others are not authorized nor covered by SKYTRON with respect to labor costs.

SKYTRON shall not be liable for any other expense, loss or damage, whether direct, incidental, consequential or exemplary arising in connection with the sale or use of or the inability to use SKYTRON products.

NO EXPRESS WARRANTY IS GIVEN BY SKYTRON WITH RESPECT TO ITS PRODUCTS EXCEPT AS SPECIFICALLY SET FORTH HEREIN. ANY WARRANTY IMPLIED BY LAW, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, IS EXPRESSLY LIMITED TO THE TWO-YEAR AND 90-DAY TERMS SET FORTH ABOVE. THE FOREGOING STATEMENTS OF WARRANTY ARE EXCLUSIVE AND IN LIEU OF ALL OTHER REMEDIES.

No dealer, agent, employee or other representative of SKYTRON is authorized to extend or enlarge this warranty.

12/03

Although current at the time of publication, SKYTRON's policy of continuous development makes this manual subject to change without notice.

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EQUIPMENT LABELS AND SPECIFICATIONS



INDICATES DANGEROUS VOLTAGE, 120 V, 60 Hz



CLASS I DEFIBRILLATION PROOF, TYPE B EQUIPMENT- IPX4 RATED.
INTERNALLY POWERED EQUIPMENT



PROTECTIVE GROUNDING.
IN ORDER TO ENSURE PROPER GROUNDING RELIABILITY,
THIS TABLE MUST BE CONNECTED TO A PROPERLY GROUNDED
HOSPITAL GRADE OUTLET.



CONNECTION FOR NEUTRAL CONDUCTOR SUPPLIED



UNIT TO BE USED ONLY IN SPECIFIED ENVIRONMENTAL CONDITIONS
TEMPERATURE: 15° - 30° C (60° -85° F)
HUMIDITY: 30% - 60% RELATIVE HUMIDITY, NON CONDENSING



AC VOLTAGE

IPX4

ENCLOSURE CLASS

V

VOLTAGE RATING OF THE UNIT

A

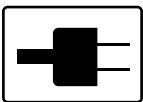
AMPERAGE RATING OF THE UNIT

HZ

FREQUENCY OF THE UNIT

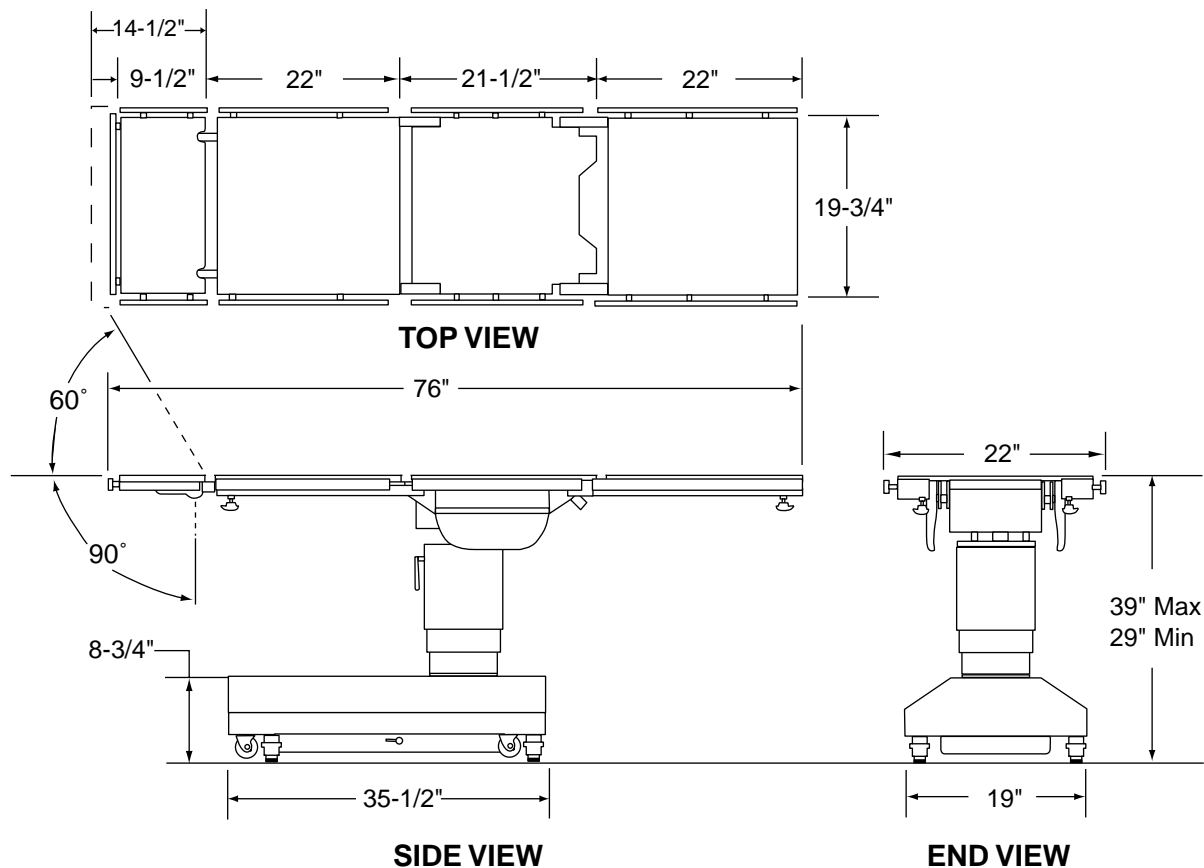


ATTENTION, CONSULT MANUAL FOR FURTHER INSTRUCTIONS.
INDICATES SPECIAL USER ATTENTION.



POWERED BY AC VOLTAGE

1700 Surgical Table Specifications



Electrical Specifications

Power requirements

120 VAC, 60Hz, 300 Watts

Current Leakage

Less than 100 micro amps

Power Cord

15 feet w/hospital grade connector(removeable)

ENTELA CERTIFIED

TO UL2601-1

CAN/CSA601.1, IEC 60601-2-46

US

C



SPECIAL USER ATTENTION

The positioning capabilities of the 1700 Table requires special attention for possible interference points when using multiple function positioning. As with the operation of any surgical table, a certain amount of care should be exercised to position the patient safely. Although the thick pads and sheets substantially protect the patient, pinch points, located at the joints of the top section should always be considered. **BE SURE THAT THE ARMS, HANDS AND FINGERS OF THE PATIENT AND THOSE OF THE OPERATING ROOM PERSONNEL ARE CLEAR OF ALL MOVING PARTS BEFORE POSITIONING THE TABLE.** Proper restraints should always be used for patient safety.

Certain accessories such as the Armboards and Table Side Extensions can be damaged when changing the position of the table top sections. Always look first to see if a desired movement is going to interfere with any accessories in use.

The operator has the ultimate responsibility of preventing damage to the table and surrounding equipment or possible injury to the patient or staff. In general, common sense will dictate when there is a potential hazard.

The following precautions should be reviewed by all personnel prior to operating the table.

A routine Instructional Program should be implemented by the facility for proper usage instructions for all personnel that may operate this table.

In every case it is recommended to keep the equipment away from disturbance sources including electromagnetic fields in order to avoid any possible instability and malfunctioning of the equipment.



WARNING



Indicates a possibility of personal injury.



CAUTION



Indicates a possibility of damage to equipment.

NOTE

Indicates important facts or helpful hints.

SPECIAL USER ATTENTION



WARNING



Risk of electrical shock. Make sure power cord is disconnected prior to accessing fuses.

NOTE

Activating any function button will activate the brake system. Using the TABLE UP function to set the brakes provides a visual assurance that the brakes are locked. As the brake cylinders are extending, the entire table will move slightly. When the table top begins to elevate, the brakes are fully locked.



WARNING



DO NOT unlock brakes when a patient is on the table. An uneven patient weight load may cause instability.



WARNING



Never operate the table without ensuring that the brakes are set.

NOTE

The main power switch can be placed in the OFF position to completely deactivate all table functions if required during certain procedures or in case of emergency.

NOTE

With an evenly distributed patient weight load, all table positioning functions will operate smoothly and quietly with a patient weight of up to 500 pounds.



WARNING



DO NOT unlock brakes when a patient is on the table. An uneven patient weight load may cause instability.



WARNING



To maximize patient safety, utilize proper restraint methods during extreme Trendelenburg positioning.



WARNING



To maximize patient safety, utilize proper restraint methods during extreme lateral tilt positioning.



WARNING



The Leg section may hit the table base or the floor if both the leg and elevation systems are placed in their full down position.

NOTE

Normal table top position is with the head (and back) section over the power cord end of the base.



WARNING



Always lock the table top in position after rotation. DO NOT rotate the top with an unevenly distributed patient weight load as instability may result.



WARNING



Make sure the TOP ROTATION LOCK HANDLE is tightened and the brakes are set before transferring the patient.

SPECIAL USER ATTENTION



WARNING



Consult manufacturer's instructions when using high frequency surgical equipment, cardiac defibrillator and cardiac defibrillator monitors.



WARNING



When an antistatic pathway is required, the table has to be used on an antistatic floor.



WARNING



The antistatic properties of the table are dependent on the use of the original pad set which was furnished with the table or an alternate approved replacement.



WARNING



Certain accessories may limit weight capacities, check with your SKYTRON representative.

NOTE

Always follow current AORN Journal Guidelines to ensure proper cleaning and disinfection procedure.



CAUTION



Caution should be taken when cleaning the table to prevent excessive fluid entry into electrical connectors.



WARNING



Exercise caution with the table top rotated 90° to the base since an improperly distributed patient load may cause the table to be tipped over.



WARNING



Always follow OSHA blood-borne pathogens standards for protective clothing, including gloves, masks and eye protection when cleaning the surgical table.



CAUTION



Thoroughly read and follow the manufacturer's directions for all cleaning fluids. DO NOT use cleaners containing phenolics.



CAUTION



When using spray cleaners DO NOT spray fluids directly into electrical receptacles.



CAUTION



Before replacing pads on the table, make sure the pads and all mating surfaces are completely dry. Moisture trapped between the pads and mating surfaces may cause distortion of table tops.

SECTION I INTRODUCTION

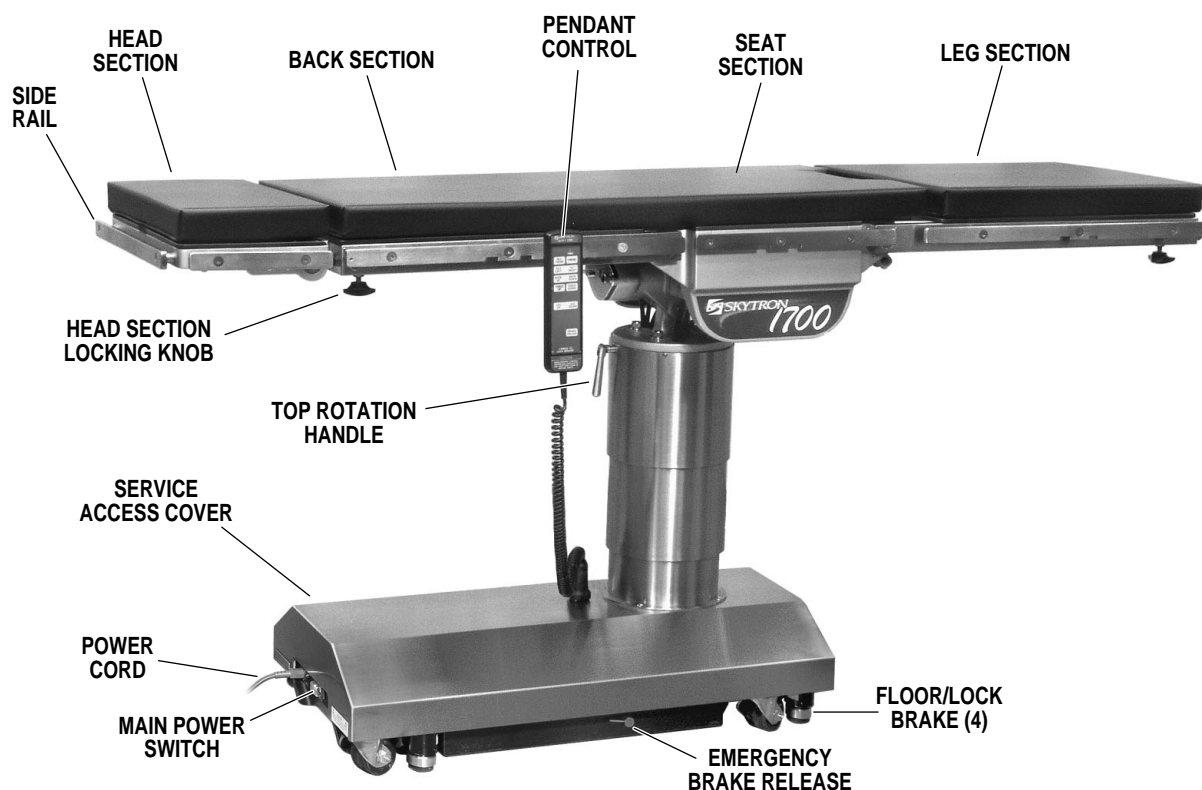


Figure 1-1. Elite 1700

1-1. General

SKYTRON's Elite 1700 Surgical Table is an electro-hydraulically operated, general purpose surgical table. See figure 1-1.

The electro-hydraulic positioning functions operated by the hand-held, push button, pendant control unit are: Trendelenburg, lateral tilt, back section, elevation, leg section and the floor lock/brake system.

Manual controls are provided for head section positioning and table top rotation.

1-2. Power Requirements

The Elite 1700 Surgical Table requires a 120VAC, 60 Hz electrical power supply. The table is equipped with a removable 15 foot long power cord with a standard three prong, hospital grade plug. The main power ON/OFF switch is located on the electrical panel. See figure 1-2.

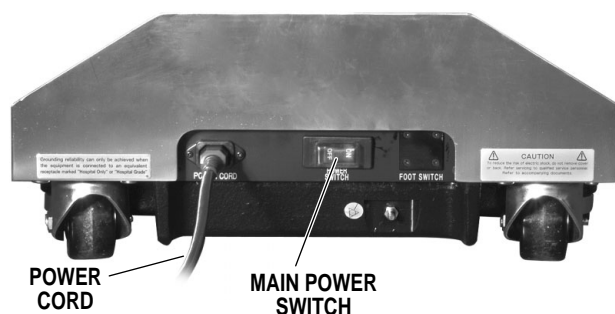


Figure 1-2. Power Switch and Fuse Location

1-3. Pendant Control Unit

The hand-held pendant control unit (figure 1-3) has a spring clip hanger located on the back of the control for storage. When the Pendant Control is not in use, it should be stored on a convenient side or end rail.

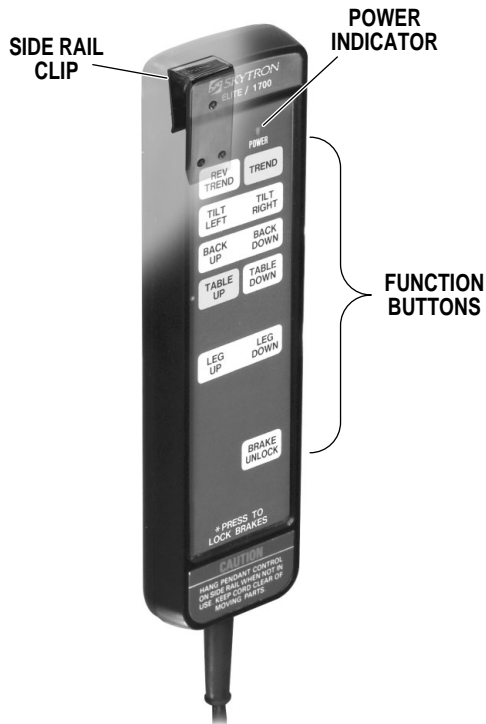


Figure 1-3. Pendant Control Unit

The function push buttons are identified with abbreviated descriptions for all functions. See figure 1-4. The Trendelenburg and table up buttons are orange, the remaining buttons are all white.

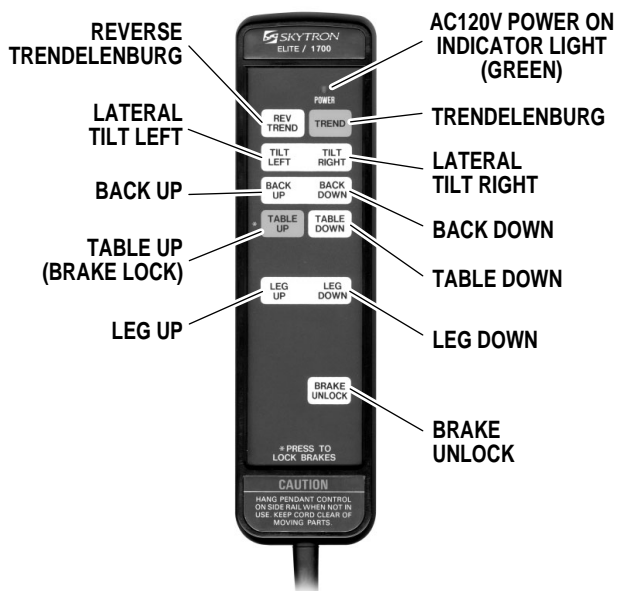


Figure 1-4. Function Push Buttons

1-4. Floor Lock/Brake System

The floor lock/brake system consists of four self-leveling, hydraulic brake cylinders which raise and support the table base off from the casters. Press the TABLE UP button on the pendant control to set the table's brakes. An electronic timer will activate the brake system until the brakes are completely set, approximately 8-10 seconds.

NOTE

Activating any function button will activate the brake system. Using the TABLE UP function to set the brakes provides a visual assurance that the brakes are locked. As the brake cylinders are extending, the entire table will move slightly. When the table top begins to elevate, the brakes are fully locked.

To unlock the brakes, press the BRAKE UNLOCK button and release. The brakes will retract automatically in approximately 7-8 seconds.



WARNING



DO NOT unlock brakes when a patient is on the table. An uneven patient weight load may cause instability.



WARNING



Never operate the table without ensuring that the brakes are set.

SECTION II OPERATION

2-1. Electrical Power

a. Check to be sure the power cord is plugged into a properly grounded, Hospital Grade, 120VAC outlet. Make sure the power cord is routed so as to prevent it from being in the way of the operating personnel.

b. Depress "Main Power ON/OFF" switch on the electrical panel. See figure 2-1. The green POWER ON indicator light on the pendant control should now be illuminated.

NOTE

The main power switch can be placed in the OFF position to completely deactivate all table functions if required during certain procedures or in case of emergency.

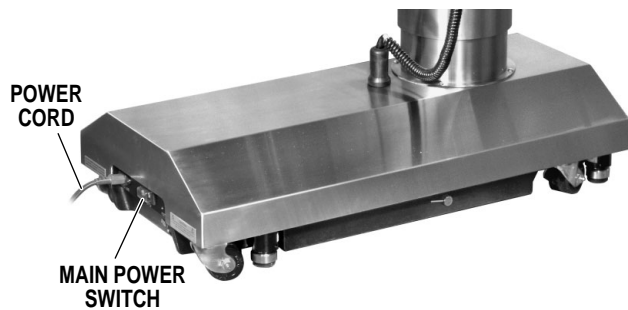


Figure 2-1. Main Power Switch

2-2. Positioning Functions

The hand-held pendant control (figure 2-2) activates the following table functions:

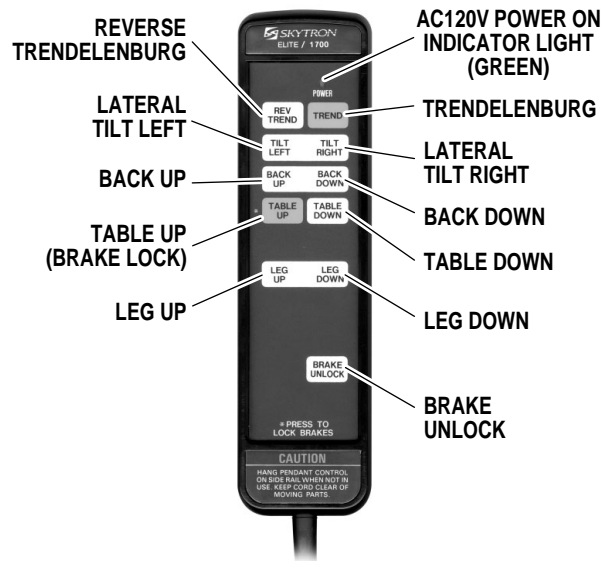


Figure 2-2. Pendant Control Unit

NOTE

With an evenly distributed patient weight load, all table positioning functions will operate smoothly and quietly with a patient weight of up to 500 pounds.

a. Floor Lock/Brake System. To activate the brakes without affecting table positioning, press the TABLE UP button. See figure 2-3. The elevation cylinder will not function until the brakes are completely extended.

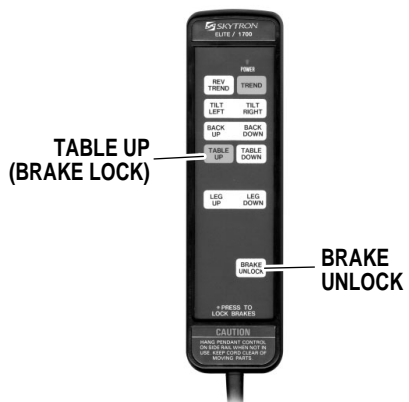


Figure 2-3. Brake System Activation

Press the BRAKE UNLOCK button on the pendant control to release the four self-leveling brake feet in order to move the table. See figure 2-3. The brake delay circuit automatically retracts the brake system with just one press of the BRAKE UNLOCK button. It takes approximately 7-8 seconds to totally release the system.



WARNING



DO NOT unlock brakes when a patient is on the table. An uneven patient weight load may cause instability.

b. Trendelenburg. To place the surgical table in a Trendelenburg (head down) position, press the TREND button (figure 2-4). Trendelenburg positioning of up to 25° may be obtained. To place the table in a reverse Trendelenburg (head up) position, press the REV TREND button. Reverse Trendelenburg positioning of up to 25° may be obtained.



WARNING



To maximize patient safety, utilize proper restraint methods during extreme Trendelenburg positioning.

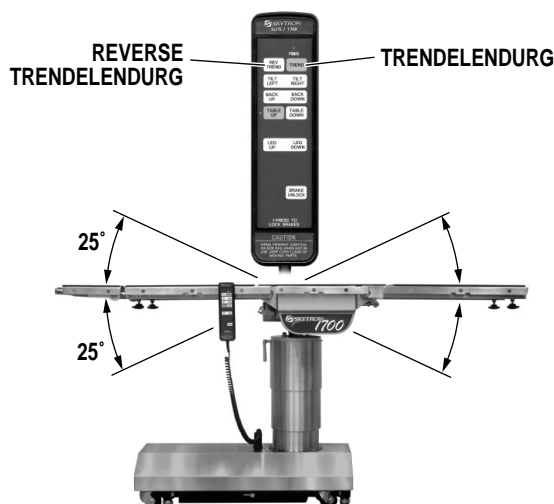


Figure 2-4. Trendelenburg Positioning

c. Lateral Tilt. To achieve lateral tilt right (as viewed from the head end of the table), press the TILT RIGHT button (figure 2-5). Tilt of up to 25° may be obtained. To achieve lateral tilt left, press the TILT LEFT button. Tilt of up to 25° may be obtained.



WARNING



To maximize patient safety, utilize proper restraint methods during extreme lateral tilt positioning.

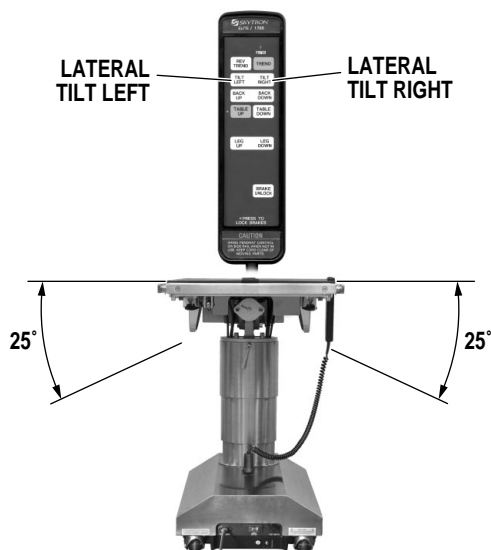


Figure 2-5. Lateral Tilt Positioning

d. Back Section. To raise the back section, press the BACK UP button (figure 2-6). The back section will raise up to 60° above horizontal. To lower the back section, press the BACK DOWN button. The back section will go down to 30° below horizontal.

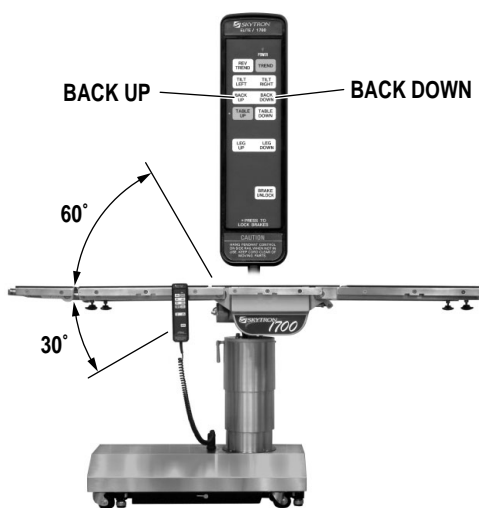


Figure 2-6. Back Section Positioning

e. Elevation. To raise table top, press the TABLE UP button (figure 2-7). The table will lift a patient weight of 500 pounds up to a maximum height of 39". To lower the table top, press the TABLE DOWN button. The table top will go down to a minimum height of 29".

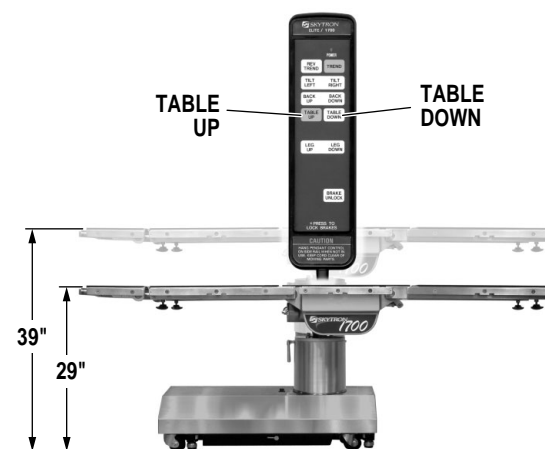


Figure 2-7. Elevation Function

f. Leg Section. To lower the leg section press the LEG DOWN button (figure 2-8). The leg section will go down to 90° below horizontal. To raise the leg section, press the LEG UP button. The leg section will go up to horizontal.

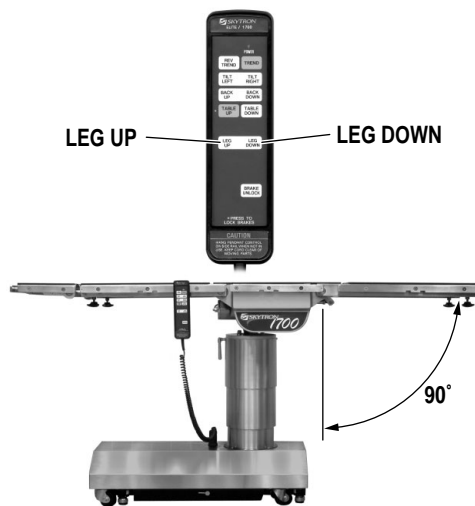


Figure 2-8. Leg Section Positioning



WARNING



The Leg section may hit the table base or the floor if both the leg and elevation systems are placed in their full down position.

2-3. Emergency Brake Release

In case of power failure or an electrical problem within the table, the emergency brake release system can be used to move the table. The control lever for this function is located on the side of the table base and is identified by an EMERGENCY BRAKE RELEASE label. Turn the lever counter-clockwise to release the brakes. See figure 2-9.

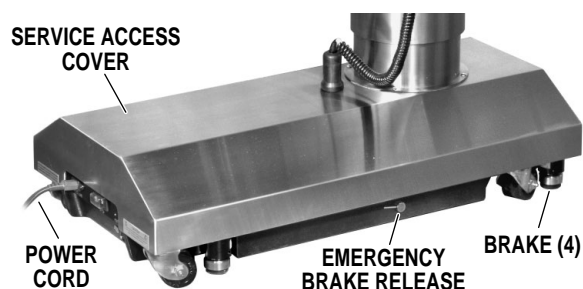


Figure 2-9. Emergency Brake Release

NOTE

The Emergency Brake Release Valve must be closed and tightened (clockwise) before activating any function.

- If the Emergency Brake Release Valve has been operated, the UNLOCK button on the pendant control will have to be pressed before brakes will lock again.

2-4. Head Section

a. A quick release positioning bar located under and to the front of the head section (figure 2-10) is used to raise or lower the head section. Pull the release bar toward the head end to allow the section to pivot up or down. Positioning from 60° above horizontal to 90° below horizontal in 15° increments is available. Release the bar to lock the head section in position.



Figure 2-10. Head Section Adjustment

b. By loosening two locking knobs beneath the back section, an additional 5" of longitudinal adjustment can be achieved. If desired, the head section may be removed by loosening the locking knobs and pulling it straight out of the back section. 1700 Tables have the capability of attaching the head section to the leg section for use as a foot extension ONLY. Do Not reverse the patient on the table without first consulting with SKYTRON. Two locking knobs are located on the inside of the leg section for securing the head section. See figure 2-11.

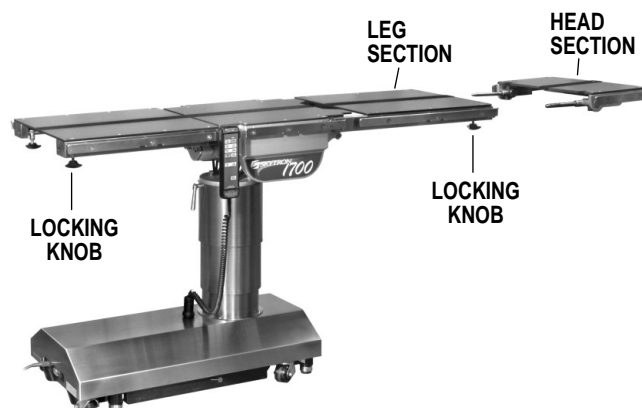


Figure 2-11. Repositioning Head Section

2-5. 180 Degree Table Top Rotation.

NOTE

Normal table top position is with the head (and back) section over the power cord end of the base.

a. The table top can be horizontally rotated 180° without having to rotate the entire table. To rotate the top, turn the TOP ROTATION LOCK HANDLE counterclockwise (figure 2-12), grasp the table by the head end and rotate the top 180° counterclockwise. Lock the top in position by tightening the TOP ROTATION LOCK HANDLE clockwise.



WARNING



Always lock the table top in position after rotation. DO NOT rotate the top with an unevenly distributed patient weight load as instability may result.



Figure 2-12. 180 Degree Top Rotation

b. The use of the optional support rod allows the table top to be rotated 90° from the base. See figure 2-13.



WARNING



Make sure the TOP ROTATION LOCK HANDLE is tightened and the brakes are set before transferring the patient.



WARNING



Exercise caution with the table top rotated 90° to the base since an improperly distributed patient load may cause the table to be tipped over.

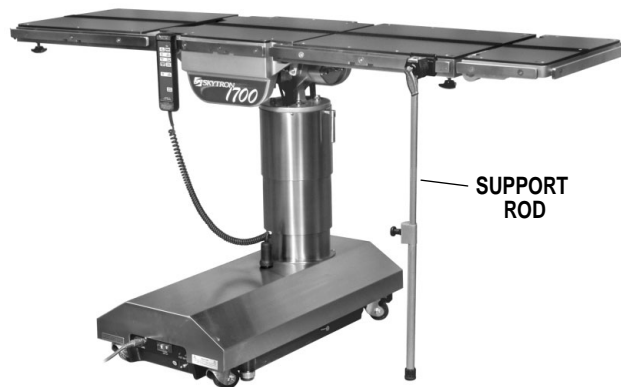


Figure 2-13. 90 Degree Top Rotation



WARNING



Consult manufacturer's instructions when using high frequency surgical equipment, cardiac defibrillator and cardiac defibrillator monitors.



WARNING



When an antistatic pathway is required, the table has to be used on an antistatic floor.



WARNING



The antistatic properties of the table are dependent on the use of the original pad set which was furnished with the table or an alternate approved replacement.

2-6. Positioning

The use of certain optional accessories available from SKYTRON further extend the positioning capabilities of the 1700 Table. Refer to the following Positioning Guidelines or contact your SKYTRON representative for further details.

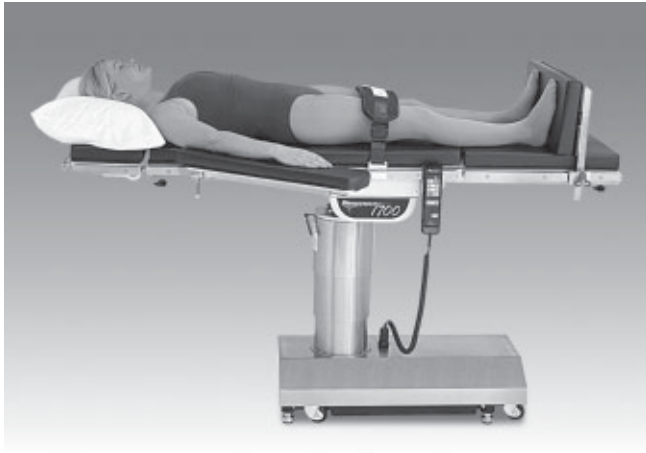


WARNING

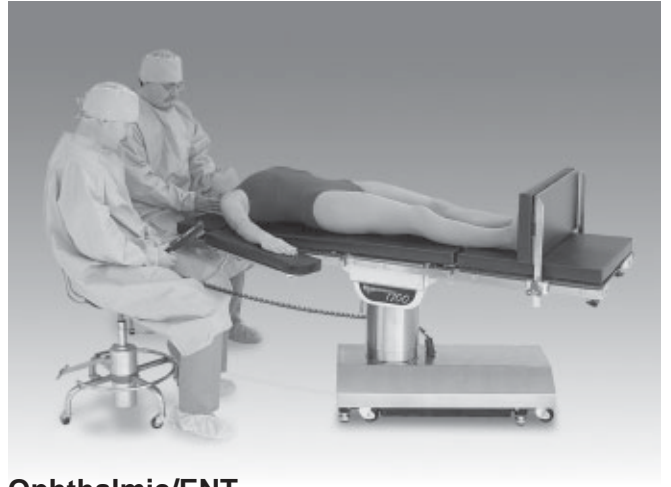


Certain accessories may limit weight capacities. Check with your SKYTRON representative.

1700 Patient Positioning Guidelines



Upper Body Imaging



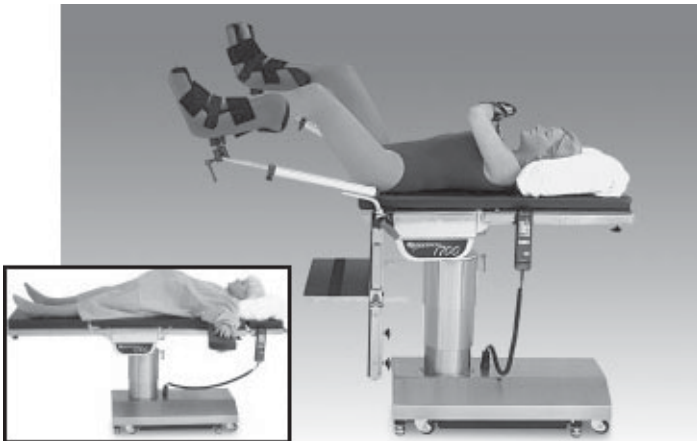
Ophthalmic/ENT



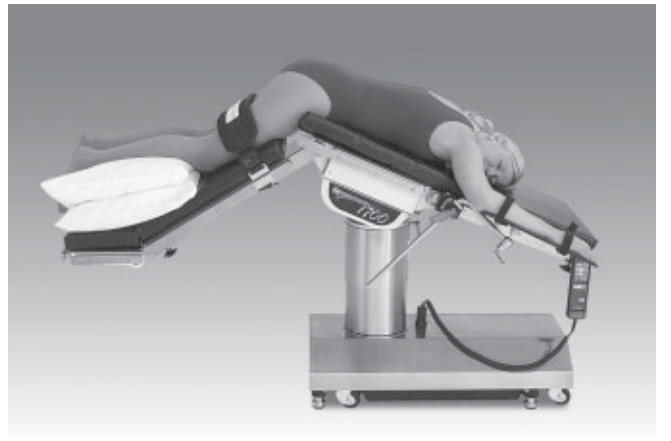
Shoulder Arthroscopy



Knee Arthroscopy



OB/GYN & C-Section



Rectal/ Hemorrhoidectomies

SECTION III MAINTENANCE

3-1. Preventive Maintenance

The following preventive maintenance checks and services are recommended to ensure the serviceability and proper operation of your SKYTRON Surgical Table.

a. During normal cleaning, a general visual examination should be made checking for leaks, loose bolts or parts, and cracked, chipped, or missing paint. Any necessary repairs should be made.

b. Semi-annually the following checks and services should be performed:

1. Check all hydraulic fittings, mini-valves and slave cylinders for proper operation and any signs of leaks.
2. Check the hydraulic speed controls and adjust if necessary.
3. Pressure check (with a gauge) the pressure relief valve.
4. Check all mechanical adjustments and adjust as necessary.
5. Check hydraulic fluid level.
6. Lubricate the slider assembly.

3-2. Cleaning Recommendations

NOTE

Always follow current AORN Journal Guidelines to ensure proper cleaning and disinfection procedure.



CAUTION



Caution should be taken when cleaning the table to prevent excessive fluid entry into electrical connectors.

The following procedures should be followed when cleaning the surgical table between cases.

Place table top in level position prior to starting cleaning procedure.



WARNING



Always follow OSHA blood-borne pathogens standards for protective clothing, including gloves, masks and eye protection when cleaning the surgical table.

Remove major contaminants from the table with disposable materials following appropriate biohazard waste disposal procedures.

Remove all table pads and place them on a flat surface for cleaning.



CAUTION



Thoroughly read and follow the manufacturer's directions for all cleaning fluids. **DO NOT** use cleaners containing phenolics.

Apply cleaning fluid liberally to top and sides of each pad and wipe with a clean lint-free cloth.

Using a clean, damp, lint-free cloth, wipe the pads to remove the cleaning fluid.

Using a clean, dry, lint-free cloth, wipe the pads to remove all moisture.

Repeat the steps to clean the bottom of the each pad.



CAUTION



When using spray cleaners DO NOT spray fluids directly into electrical receptacles.

Repeat cleaning procedure for all table surfaces including the top, sides, elevation column, base and all accessories.



CAUTION



Before replacing pads on the table, make sure the pads and all mating surfaces are completely dry. Moisture trapped between the pads and mating surfaces may cause distortion of table tops.

When the cleaning procedure is complete, replace all pads and accessories as applicable.

Remove pendant control from table side rail and apply cleaning solution to the pendant control and cord.

Use a clean cloth dampened with water to remove cleaning solution.

Use another clean damp cloth to remove any remaining residue.

Install pendant control on side rail for storage when cleaning procedure is complete.

3-3. Service

Table maintenance can be performed by trained maintenance personnel using SKYTRON authorized replacement parts and service techniques. Service instructions and parts are available from SKYTRON.

Preventive Maintenance contracts are available through your local SKYTRON representative.

To obtain service instructions, replacement parts, factory service or preventive maintenance contracts, contact your nearest SKYTRON representative or write or call:

SKYTRON
5000 36th Street S.E.
Grand Rapids, MI 49512
1-800-SKYTRON (1-800-759-8766)
Fax. 1-616-957-5053

